# This Page Is Inserted by IFW Operations and is not a part of the Official Record

# **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,128	12/27/2000	Yeong-Taeg Kim	SAM1.0081	5001
7590 08/09/2004			EXAMINER	
Kenneth L. Sherman, Esq.		,	SHELTON, BRIAN K	
Myers Dawes Andras & Sherman, LLP 19900 MacArthur Blvd., 11th Floor			ART UNIT	PAPER NUMBER
Irvine, CA 92612			2611	

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summans					
Office Action Summary Examiner Art Unit					
Brian Shelton 2611					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communicatio  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on <u>27 December 2000</u> .					
This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1-25</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-25</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  A) Interview Summary (PTO-413)  Paper No(s)/Mail Date					
1) Motice of Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)					
Patent and Trademark Office.					

Art Unit: 2611

#### **DETAILED ACTION**

- 1. This Action is in response to the Application filed 27 December 2000.
- 2. The Application has been examined. **Original claims 1-25** are pending. The rejections cited are as stated below:

#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1-4 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ebisawa, U.S. Patent No. 5,886,731.

As for **claim 1**, Ebisawa discloses an interactive digital video service network (Fig. 1, col. 3, line 54 – col. 4, line 8), comprising:

a) means for providing a digital signal (Fig. 2, AV Data Transmitting
 Apparatus 100a), the digital signal having information reflective of at least

- one regular program and at least one Background Commercial ("program data" and "CM data," col. 6, line 20 col. 7, line 56);
- b) an end user (i.e., "viewer"), the end user having a receiver for receiving the digital signal (Fig. 4, Receiving Apparatus 200a, comprising Receiving Unit 202; col. 8, lines 24-31) and a presentation unit for displaying at least a portion of the digital signal (Fig. 4, Monitor 300, col. 8, lines 1-5);
- a channel communicating the digital signal from the means for providing a digital signal to the receiver (col. 8, lines 25-31 and col. 8, lines 54-61 [signal transmitted from AV Data Transmitting Apparatus **100a** and received by Receiving Unit **202** inherently discloses a "channel communicating the digital signal"]);
- d) selection means (Fig. 4, Selecting Unit 203 and Control Unit 209) for allowing the end user to select between the at least one regular program and the at least one Background Commercial for display on the presentation unit (col. 8, lines 1-5; col. 8, lines 24-37, col. 8, lines 54-57, and col. 9, lines 6-12); and
- e) a return channel (i.e., telephone line; see Fig. 4) communicating

  Background Commercial Viewing Data from the receiver to a digital
  service operator (Fig. 4, Receiving State Information Transmitting Unit
  201, col. 8, lines 8-19 [communication of Receiving Apparatus 200 to AV
  Data Transmitting Apparatus 100a via telephone line]; see col. 17, lines
  12-15).

Art Unit: 2611

Regarding **claim 2**, Ebisawa discloses the information reflective of the at least one Background Commercial contains Audio-Visual Information (col. 6, lines 30-33 and col. 6, lines 55-62).

Regarding **claim 3**, Ebisawa discloses a control switch (Fig. **4**, Command Input Unit **301**) whereby the user can filter the Background Commercial portion of the digital signal from being delivered to the presentation unit (col. 8, lines 28-31; col. 9, lines 26-39).

Regarding **claim 4**, Ebisawa discloses means for communicating the Background Commercial viewing data over the return channel from the receiver to the service operator (Fig. **4**, Receiving State Information Transmitting Unit **201**, col. 8, lines 8-19), and means for updating a Background Commercial Viewing Record with the Background Commercial Viewing Data communicated from the receiver to the digital service operator (col. 16, lines 37-54).

As for **claim 11**, Ebisawa discloses a method for providing digital programming to viewers (Fig. **1**, col. 3, line 54 – col. 4, line 8), the method comprising the steps of:

a) creating a combined digital television signal which combines information reflective of regular programming and Background Commercials, the

Art Unit: 2611

information reflective of the Background Commercials containing Audio-Visual Information ("program data" and "CM data," col. 6, line 20 – col. 7, line 56).

- b) transmitting the combined digital television signal over a channel to end users (Fig. 2, AV Data Transmitting Apparatus 100a; col. 8, lines 24-30);
- c) receiving the combined digital television signal at a receiver (Fig. 4, Receiving Apparatus 200a, comprising Receiving Unit 202; col. 8, lines 24-31);
- d) selecting a selected portion of the combined digital signal from the information reflective of the regular programming and the Background Commercials for display at a presentation unit (Fig. 4, monitor 300; col. 8, lines 24-37, col. 8, lines 54-64, and col. 9, lines 6-12); and
- e) displaying the selected portion of the combined digital on the presentation unit (col. 8, lines 54-64).

Regarding **claim 12**, Ebisawa discloses the steps of creating Background Commercial Viewing Data (col. 8, lines 8-19), communicating the Background Commercial Viewing Data from the receiver to the service operator (col. 8, lines 8-19), and updating a Background Commercial Viewing Data communicated from the receiver to the service operator (col. 16, lines 37-54).

Art Unit: 2611

Regarding **claim 13**, Ebisawa discloses the steps of determining an economic benefit based upon the updated a Background Commercial Viewing Record and providing that economic benefit to the end user (col. 16, lines 36-54, wherein payment is demanded corresponding to ratio of program viewing time and commercial viewing time).

#### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 5-10, 14, and 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebisawa, U.S. Patent No. 5,886,731 in view of Alexander et al. (Alexander), U.S. Patent No. 6,177,931.

Regarding **claim 5**, Ebisawa discloses an interactive digital video service network (Fig. **1**, col. 3, line 54 – col. 4, line 8), comprising:

a) means for providing a digital signal (Fig. 2, AV Data Transmitting Apparatus 100a), the digital signal having information reflective of at least one regular program and at least one Background Commercial ("program data" and "CM data," col. 6, line 20 – col. 7, line 56), wherein the

Art Unit: 2611

information reflective of the at least one Background Commercial contains audio visual information (col. 6, lines 30-33 and col. 6, lines 55-62);

- b) an end user (i.e., "viewer"), the end user having a receiver for receiving the digital signal (Fig. 4, Receiving Apparatus 200a, comprising Receiving Unit 202; col. 8, lines 24-31) and a presentation unit for displaying at least a portion of the digital signal (Fig. 4, Monitor 300, col. 8, lines 1-5), the Background Commercial being presented to the presentation unit with the at least one regular program (col. 9, lines 26-39); and
- a channel communicating the digital signal from the means for providing a digital signal to the receiver (col. 8, lines 25-31 and col. 8, lines 54-61 [signal transmitted from AV Data Transmitting Apparatus **100a** and received by Receiving Unit **202** inherently discloses a "channel communicating the digital signal"]).

Although Ebisawa discloses Background Commercials containing audio-visual data, Ebisawa fails to specifically discloses the Background Commercials containing banner information, as claimed.

However, Alexander, in an analogous art, teaches background commercials provided to a user terminal where the background commercial contains banner information (col. 32, lines 35-60 [customized overlay messages], where Applicant defines banner information as taking the form of "text, graphics, and images, which are associated with the content of the Background Commercials." See Application, dated 12/27/2000, at page 12, lines 5-7) for the

Art Unit: 2611

benefit of providing customized presentation of advertisements according a viewer profile (see col. 2, lines 19-21).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the background commercials of Ebisawa to incorporate background commercials containing banner information, as taught by Alexander, for the benefit of providing customized presentation of advertisements according to a viewer profile in a digital video service network.

The limitation of **claim 6** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 5. Specifically, Ebisawa discloses selection means (Fig. **4**, Selecting Unit **203** and Control Unit **209**) for allowing the end user to select between the at least one regular program and the at least one Background Commercial for display on the presentation unit (col. 8, lines 1-5; col. 8, lines 24-37, col. 8, lines 54-57, and col. 9, lines 6-12).

The limitation of **claim 7** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 5. Specifically, Ebisawa discloses a return channel (i.e., telephone line; see Fig. 4) for communicating Background Commercial Viewing Data from the receiver to a digital service operator (Fig. 4, Receiving State Information Transmitting Unit **201**, col. 8, lines 8-19 [communication of Receiving Apparatus **200** to AV Data Transmitting Apparatus **100a** via telephone line]; see col. 17, lines 12-15).

The limitation of **claim 9** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 5. Specifically, Ebisawa discloses a control switch (Fig. **4**, Command Input Unit **301**) whereby the user can filter the background portion of the digital signal from being delivered to the presentation unit (col. 8, lines 28-31; col. 9, lines 26-39).

The limitation of **claim 10** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 5. Specifically, Ebisawa discloses means for communicating the Background Commercial Viewing Data over the return channel from the receiver to the service operator (Fig. 4, Receiving State Information Transmitting Unit **201**, col. 8, lines 8-19), and means for updating a Background Commercial viewing record with the background commercial viewing data communicated from the receiver to the digital service operator (col. 16, lines 37-54).

As for **claim 14**, the disclosure of Ebisawa is relied upon, as discussed above relative to claim 11. Ebisawa fails to disclose presenting banner information with the selected portion of the combined digital signal as claimed.

However, Alexander, in an analogous art, teaches presenting banner information with a selected portion of a combined digital signal for the benefit of (col. 32, lines 35-60 [customized overlay messages], where Applicant defines

banner information as taking the form of "text, graphics, and images, which are associated with the content of the Background Commercials." See Application, dated 12/27/2000, at page 12, lines 5-7) for the benefit of providing customized presentation of advertisements according a viewer profile (see col. 2, lines 19-21)

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the background commercials of Ebisawa to incorporate presenting Banner Information with the selected portion of the combined digital signal for display on the presentation unit, as taught by Alexander, for the benefit of providing customized presentation of advertisements according to a viewer profile in a method for providing digital programming to viewers.

As for **claim 18**, Ebisawa discloses a receiver for an interactive digital video service network (Fig. 1, col. 3, line 54 – col. 4, line 8), the receiver comprising:

a) means for receiving a digital signal (Fig. 4, Receiving Apparatus 200a, comprising Receiving Unit 202; col. 8, lines 24-31), the digital signal having information reflective of a regular program and at least one Background Commercial ("program data" and "CM data," col. 6, line 20 – col. 7, line 56), wherein the information reflective of the at least one Background Commercial contains Audio-Visual Information (col. 6, lines 30-33 and col. 6, lines 55-62).

- b) means for decoding (Fig. 4, Communications Code Decoder 205) the digital signal and providing a first signal reflective of the regular program and a second signal reflective of the at least one Background Commercial (col. 8, lines 31-41);
- means for receiving the second signal reflective of the at least one

  Background Commercial (Fig. 4, Image Decoder 208) and providing a BC signal ("second BC signal") reflective of the Audio-Visual information related to the one of the at least one Background Commercials (col. 8, lines 54-61); and
- d) means for providing a video output signal (Fig. 4, monitor 300; col. 8, lines 1-5 and col. 8, lines 61-64).

Ebisawa, though, fails to disclose the background commercial containing banner information, the first BC signal reflective of the banner information, and combining information from the second BC signal with information from the signal reflective of the background commercial, as claimed.

However, Alexander, in an analogous art, teaches receiving a background commercial having information which contains audio-visual information and banner information (i.e., text overlay message, col. 32, lines 35-41), receiving a signal ("first BC signal") reflective of the banner information related to the background commercial (col. 32, lines 55-59, describing embedding customized advertising information within advertisement stream), and providing a video output signal combining information from an audio-visual commercial ("second").

BC signal") (televised advertisement) see col. 32, lines 55-56) with information reflective of the background commercial (col. 32, lines 35-41 [customized overlay messages] and col. 32, lines 55-60), where Applicant defines banner information as taking the form of "text, graphics, and images, which are associated with the content of the Background Commercials." See Application, dated 12/27/2000, at page 12, lines 5-7) for the benefit of providing customized presentation of advertisements according to a viewer profile (see col. 2, lines 19-21).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the background commercial information and video output signal to incorporate information reflective of the Background Commercial contains Banner information, providing a first BC signal reflective of the Banner Information related to one of the at least one Background Commercials, and providing an video output signal combining information from the second BC signal with information from the signal reflective of the background commercial, as taught by Alexander, for the benefit of providing customized presentation of advertisements according to a viewer profile in a receiver for an interactive digital video service network.

The limitation of **claim 19** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 18. Specifically, Ebisawa discloses the means for receiving the signal reflective of the at least one Background Commercial provides a third BC signal (i.e., "control signal")

reflective of the information identifying the one of the at least one Background Commercials (the control signal identifies which ad to insert; col. 8, lines 54-57).

The limitation of **claim 20** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 18. Specifically, Ebisawa discloses a selection means (Fig. **4**, Selecting Unit **203** and Control Unit **209**) for allowing an end user to select between information from the signal reflective of the regular program and information from the second signal for inclusion in the video output signal (col. 8, lines 1-5; col. 8, lines 24-37, col. 8, lines 54-57, and col. 9, lines 6-12).

The limitation of **claim 21** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 18. Specifically, Ebisawa discloses a user interface means (Fig. 4, Command Input Unit 301) or obtaining user commands to enable or disable the inclusion of the second BC signal in the video output signal and a control unit for providing control signals reflective of the User commands (Fig. 4, control unit 209; col. 8, lines 28-31, col. 8, lines 54-57; col. 9, lines 26-39).

The limitation of **claim 22** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 18. Specifically, Ebisawa discloses means for storing Background Commercial view data (Fig. 4,

Receiving State Information Transmitting Unit **201**, col. 8, lines 8-19) and a transmission means for providing a return signal reflective of the Background Commercial view data (col. 16, lines 37-54).

The limitation of **claim 23** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 18. Specifically, Ebisawa discloses storage means (Fig. **4**, Storing Unit **207**) for storing information from the second BC signal, and means for replaying (Fig. **4**, Image Decoder **208**) the second BC signal stored in the storage means to the means for providing a video output signal for inclusion in the video output signal (col. 8, lines 42-60).

The limitation of claim 24 is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 18. Specifically, Ebisawa discloses a storage means (Fig. 4, Storing Unit 207) for storing information from the second BC signal and means for replaying (Fig. 4, Image Decoder 208) the second BC signal stored in the storage means to the means for providing a video output signal for inclusion in the video output signal, wherein there is information reflective of a plurality of Background Commercials within the digital signal, the second BC signal stored in the storage means is related to the plurality of Background Commercials, and the means for playing provides one or

several of the stored plurality of Background Commercial for inclusion in the video output (col. 8, lines 42-60).

The limitation of **claim 25** is encompassed by the teachings of Ebisawa in view of Alexander, as discussed above relative to claim 18. Specifically, Ebisawa discloses a storage means (Fig. **4**, Storing Unit **207**) for storing information from the signal reflective of the regular program, and means for replaying (Fig. **4**, Image Decoder **208**) the signal reflective of the regular program stored in the storage means to the means for providing a video output signal for inclusion in the video output signal (col. 8, lines 42-60).

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blahut et al. (Blahut), U.S. Patent No. 5,532,735 discloses a system for interactive television wherein viewers are allowed to select a desired level of advertisements with which they are provided and further, wherein the bill of a viewer is adjusted according to the amount of advertisements viewed in a show (abstract, Fig. 5, col. 2, line 47 – col. 6, lines 49).

Neel et al. (Neel), U.S. Patent No. 5,838,314 discloses an interactive video services system wherein a user is provided with the option to selectively

view advertisements and subsequently receive pay per view programming at a discounted price after viewing the selected advertisement (col. 5, line 16-39, col. 14, line 49 – col. 15, line 36, col. 17, line 26 – col. 19, line 44, Figs. **4** and **7a-7c**).

Picco et al. (Picco), U.S. Patent No. 6,029,045 discloses a system for transmitting programming data together with advertisement data and inserting the advertisement into a local content space according to a viewer profile into the programming data (abstract, Figs. **7** and **9-10**, col. 13, line 36 – col. 14, line 16).

Knudson et al. (Knudson), U.S. Patent No. 6,564,379 discloses an interactive television programming guide which receives advertisement data and displays the received advertisements in a browse display (col. 5, line 43 – col. 6, line 25, col. 7, lines 8-46, Figs. **6-14**).

8. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents

Art Unit: 2611

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Shelton whose telephone number is (703) 305-8714. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Shelton Examiner Art Unit 2611 Page 18

BS

CHRIS GRANT
PRIMARY EXAMINER